

WE CLAIM:

1. A method for the optimization of communication between a terminal device and at least one data source, both of which are interconnected by a communication medium, which terminal device receives data via said communication medium from said at least one data source, which terminal device
 - 5 transmits communications to said data source via said communication medium, said apparatus comprising the steps of:
 - producing a prioritized plurality of information segments from each of a plurality of data items which are available from said at least one data source; and
 - providing data to said terminal device, identifying a selected data item by a
 - 10 first of said prioritized information segments of said selected data item.
2. The method of claim 1 wherein said step of providing data to said terminal device comprises:
 - transmitting, in response to user input at said terminal device transmitting data to said at least one data source identifying said selected data item, data
 - 5 representative of a second of said prioritized plurality of information segments of said selected data item to said terminal device.
3. The method of claim 2 wherein said step of providing data to said terminal device further comprises:
 - transmitting, in response to transmission of said second prioritized information segment of said selected data item to said terminal device, data
 - 5 representative of at least a third of said prioritized information segments of said selected data item to said terminal device.
4. The method of claim 1 wherein said step of providing data to said terminal device comprises:
 - transmitting, in response to transmission of data to said data source indicative of a user input at said terminal device which requests the entirety of said
 - 5 selected data item, data representative of all of said prioritized information segments of said selected data item to said terminal device.

5. The method of claim 1 further comprising the step of:

managing said plurality of data items which are available from said data source, to enable efficient access of said plurality of data items by a user at said terminal device.

6 The method of claim 5 wherein said step of managing said plurality of data items comprises:

producing data representative of each of said plurality of data items, which produced data is selected from the class of data item characterizing information which includes: data item access information, data item summary, data item title, data item keywords.

7. The method of claim 6 wherein said step of managing said plurality of data items further comprises:

transmitting, in response to user input at said terminal device transmitting data to said at least one data source requesting identification of all of said plurality of data items, data item characterizing information of all of said plurality of data items to said terminal device.

8. The method of claim 6 wherein said step of managing said plurality of data items further comprises:

transmitting, in response to user input at said terminal device transmitting data to said at least one data source requesting identification of all of said plurality of data items which satisfy criteria input by said user, data item characterizing information of all of said plurality of data items which satisfy said criteria input by said user to said terminal device.

9. The method of claim 6 wherein said step of managing said plurality of data items further comprises:

transmitting, in response to user input at said terminal device transmitting data to said at least one data source identifying selected ones of said plurality of

data items, data item characterizing information of said identified selected ones of said plurality of data items to said terminal device.

10. The method of claim 5 wherein said step of managing said plurality of data items comprises:

generating user interest profile data which is indicative of ones of said data items which are likely to be of interest to a user at said terminal device.

11. The method of claim 10 wherein said step of generating user interest profile data comprises:

calculating, in response to said user accessing ones of said plurality of data items, similarity measures to identify other likely data items of interest to said user.

12. The method of claim 10 wherein said step of managing said plurality of data items further comprises:

searching, in response to said user interest profile data, said prioritized information segments of all of said data items to identifying a selected data item
5 which most likely corresponds to said user interest profile data.

13. The method of claim 1, wherein a plurality of terminal devices are concurrently connected to said communication medium, further comprising the step of:

scheduling activation of said means for providing data to said terminal
5 device to sequentially serve said plurality of terminal devices according to a determined priority schedule.

14. The method of claim 13 wherein said step of scheduling comprises:
deciding what information segment is most likely usefully broadcast to each of said plurality of terminal devices.

Sub A1 15. A method of providing a subscriber with program information regarding a plurality of concurrently broadcast programs in a data distribution system which comprises a multimedia broadcast medium which concurrently

carries a plurality of programs, which are made available to a plurality of subscribers, which are connected to the multimedia broadcast medium via respective terminal adapters which contain a directory memory, comprising the steps of:

5 storing an entirety of directory information in a memory located in said multimedia broadcast medium;

excerpting a subscriber specific subset of directory information from said directory information stored in said memory;

10 transmitting said excerpted directory information to said terminal adapter memory for storage therein;

enabling a subscriber at said subscriber terminal device to access said excerpted directory information stored in said terminal adapter memory.

16. The method of claim 15 wherein said step of excerpting a subscriber specific subset of directory information comprises:

generating subscriber interest profile data which is indicative of ones of said concurrently broadcast programs which are likely to be of interest to a subscriber at said subscriber terminal associated with said subscriber.

17. The method of claim 16 wherein said step of generating subscriber interest profile data comprises:

calculating, in response to said subscriber accessing ones of said plurality of broadcast programs, similarity measures to identify other likely broadcast programs of interest to said subscriber.

18. The method of claim 16 wherein said step of managing said plurality of data items further comprises:

searching, in response to said user interest profile data, said prioritized information segments of all of said data items to identifying a selected data item which most likely corresponds to said user interest profile data.

19. The method of claim 15 further comprising the step of:

scheduling activation of said step of transmitting said excerpted directory information to sequentially serve said plurality of subscriber terminals according to a determined priority schedule.

20. The method of claim 18 wherein said step of scheduling comprises:
deciding what excerpted directory information is most likely usefully broadcast to each of said plurality of subscriber terminals.

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